INFLUENCE OF AGE OF IMMIGRANT POPULATION ON IMPORTANT DISEASES

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BACKGROUND:
The arrival of new immigrants is a growing phenomenon in Europe. Although the most of these immigrants are young people, a second migratory phenomenon due to the arrival of their relatives, including elderly, appears when this first population of immigrants is established in the new country. The aim of this study is to describe the effect of age in the presence of imported diseases in a group of immigrants.

MATERIAL AND METHODS:
• A prospective, descriptive study was designed to include all the immigrants attending in Tropical Medicine Unit of Hospital Central de Asturias, Spain, from 2007 to 2015.
• Immigrants were grouped into four age categories: less than 18 years (group 1, 93 individuals), 19-35 years (group 2, 383), 36-55 years (group 3, 265) and older than 55 years (group 4, 67).
• Screening for all individuals comprised blood count, biochemistry, and routine microbiological detection.
• Qualitative variables were compared using the Chi2 test or the Fisher exact test, when necessary. For quantitative variables, the Student t test or the Mann Whitney U test were used. Significance was designated at p<0.05.

RESULTS:
• 824 patients were analyzed (51.2% women, average age 34 [12] years.
• In 129 patients, the study did not show any disease. The presence of pathology was more frequent in patients older than 55 years (p=0.010, OR:4.66 [19.2-110]).
• Regarding cosmopolitan diseases, HIV infection (p=0.004, OR: 0.117, [0.016-0.852]), syphilis (p=0.0001, OR:0.165, [0.040-0.681]) and VHB vaccination (p=0.001 ) were infrequent in group 1. VIH infection was more frequent between 35-55 years (p= 0.0001 OR 2.268 [1.359-3.785]) like as Chronic VHB (p= 0.074).
• Syphilis (p= 0.0001 OR 4.44 [2.424-8.148]) and HCV infection (p=0.0001, OR: 19.471 [9.005-42.100]) were more frequent in older than 55 years.
• Twelve patients has a tuberculosis, four of them in elderly patients.
• 19 patients had a malaria, significantly more frequent in patients older 55 years (p= 0.017, OR 3.515[1.356-9.180]).
• The presence of helmintiasis were more frequent in patients under 18 years specially Ascaris lumbricoides (p=0.035, OR:3.425 [1.162-10.100]), and Schistosoma spp. (p=0.0001 OR:3.651 [1.909-6.982]) and in patients older than 55 years, specially A. lumbricoides (p=0.010 OR:4.888 [1.645-14.257]), and T. trichuria (p=0.049 OR:2.135 [0.994-4.584]).
• D. fragilis was more frequent in patients under 18 years (p=0.020, OR 3.710 [1.299-10.599].
• Filariasis were significantly higher in group 4 (p=0.004 OR:4.365 [1.744-10.929]).

CONCLUSIONS:
1. Although the presence of imported diseases is frequent in immigrant population at all ages, differences between age groups can be found.
2. Thus, helmintiasis, HCV hepatitis and syphilis are more frequent in patients older than 55 years.
3. These data support the need to design screening strategies for imported diseases according to the age of the patient.